

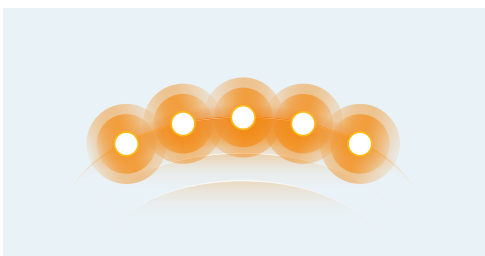
Sonamic Panorama

Music brought to life

When searching for a new car, consumers look for something special. Interior features are increasingly important. The vehicle's sound system becomes a real selling point with Fraunhofer's Sonamic Panorama. It transforms the sound system into an audio experience that brings to life all the richness and intensity music can offer. Passengers feel as if they are right there on stage with their favorite band.

Working Principle

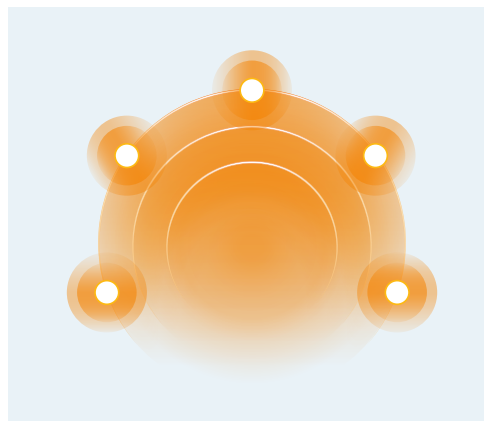
The Sonamic Panorama algorithm separates the individual sound sources from a stereo recording, evenly distributing them in a U-shaped soundstage that surrounds the passengers. Outer sound sources in the stereo signal emerge from behind the listener, while the mid sources remain acoustically unaltered directly in front (see illustrations). That way, everyone can appreciate details that otherwise would be imperceptible in the pure stereo signal. The playback is kept free of artifacts and is robust to FM noise and poor digital reception.



Stereo image: all sound sources located on the dashboard

Application

Fraunhofer's Sonamic Panorama was developed especially for small, medium and compact class vehicles. The algorithm does not require any additional hardware and is compatible with existing speaker configurations (minimum of four speaker positions). Installing a center speaker is recommended for the best results.



Panorama upmix: sound sources around the listener

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